

Comparisons of Job Characteristics

Focus Occupation: [Water and Wastewater Treatment Plant and System Operators \(51-8031\)](#)

Associated Occupation: [Environmental Engineering Technicians \(17-3025\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 72

Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)

Associated Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	15.8	11.1	<<	Extensive education and/or training may be required
Design	5.2	11.1	9.8	<	Expanded education and/or training may be required
Building and Construction	4.0	10.6	10.0	0	Current knowledge level may be sufficient
Physics	4.3	10.2	13.2	>>	Current knowledge level is likely more than sufficient
Law and Government	5.9	9.5	9.4	0	Current knowledge level may be sufficient
Biology	3.7	6.8	10.9	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 45

Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)

Associated Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Reading Comprehension	10.7	16.3	9.6	<<	Extensive development of skills in this area may be required
Critical Thinking	10.8	14.5	9.4	<<	Extensive development of skills in this area may be required
Active Learning	8.7	12.6	7.9	<<	Extensive development of skills in this area may be required
Mathematics	6.2	11.3	6.4	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	9.7	10.3	0	Current skill level may be sufficient

Management of Material Resources	3.7	6.8	2.5	<<	Extensive development of skills in this area may be required
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The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)

Associated Occupation: Environmental Engineering Technicians (17-3025)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	16.6	10.6	<<	Extensive improvement in abilities may be required
Problem Sensitivity	11.1	15.9	10.3	<<	Extensive improvement in abilities may be required
Near Vision	11.1	14.7	11.8	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	14.5	9.3	<<	Extensive improvement in abilities may be required
Inductive Reasoning	10.2	13.6	9.3	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	13.3	9.4	<<	Extensive improvement in abilities may be required
Category Flexibility	9.0	11.8	8.3	<<	Extensive improvement in abilities may be required
Mathematical Reasoning	6.3	10.6	6.4	<<	Extensive improvement in abilities may be required
Number Facility	6.3	10.6	7.2	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 66

Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)

Associated Occupation: Environmental Engineering Technicians (17-3025)

Work Activities	Exclusivity of Activity
Collect samples for testing	58
Use laboratory equipment	60
Use precision measuring tools or equipment	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 67

Focus Occupation: Water and Wastewater Treatment Plant and System Operators (51-8031)
Associated Occupation: Environmental Engineering Technicians (17-3025)

Tools and Technologies	Exclusivity
Business function specific software	1
Cameras	2
Chromatographic measuring instruments and accessories	16
Clinical and diagnostic analyzers and accessories and supplies	18
Computers	1
Content management software	6
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Gas analyzers and monitors	10
Indicating and recording instruments	2
Industry specific software	1
Laboratory decanting and distilling and evaporating and extracting equipment and supplies	19
Light and wave generating and measuring equipment	4
Liquid and solid and elemental analyzers	19
Pumps	9
Sampling equipment	12
Spectroscopic equipment	10
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.